

SHURKOVSKAYA, N. A.

USSR/Chemistry - Catalysts

Jan 52

"The Structure of the Surface of Disperse Iron,"
N. A. Shurkovskaya, B. P. Bruns, I. V. Trefilova

"Zhur Fiz Khim" Vol XXVI, No 1, pp 48-55

Developed method for obtaining water vapor-gas
mixts, which permits variation of ratio of components
within very wide limits, even when the concn of
water vapor is low. Detd adsorption of oxygen
from H₂O - H₂ by disperse iron contg 2% of Al₂O₃
as promoter with ratios of water vapor to hydrogen
from 0.0006 to 0.018. Isotherms of adsorption

211741

Indicate presence of 2 types of areas on surface
having limiting capacities of 0.224 mg/g Fe and
1.868 mg/g Fe and heats of interaction with water
vapor of 10,100 cal/mol H₂O and 4,300 cal/mol H₂O.

211741

SHURMOVSKAYA, N.A.
SHURMOVSKAYA, N.A.; BURSHTEYN, R.Kh.

The iron electrode in a voltaic cell. Zhur.prikl.khim. 30
no.8:1176-1184 Ag '57. (MIRA 11:1)
(Electric batteries)

SHURMOVSKAYA, N. A.

✓ An investigation by the contact potential-difference measurement method of the oxygen interaction with nickel. N. A. Shurmovskaya and R. Kh. Burshteyn. *Zhur. Fiz. Khim.* 31, 1150-3(1957); *et. C.A.* 42, 8585d; 44, 6743e;

4
1-4E2C
1-4E3d

46, 3820d. -- The O effect upon the electron emission from Ni was studied in an app. described previously, and consisting of a diode valve with a movable W cathode and a Ni-plate anode. The changes in the work function of electron emission from Ni caused by the sorbed O were detd. from differences in the voltage-temp. relation changes in comparison with pure Ni. At 35° O increased the electron-emission work function and at higher temps. the work function was reduced. At 100° 1.3×10^{18} mols. of O were adsorbed per sq. cm. of the surface (1/10 of the no. of mols. to produce a unimol. layer), and the work function was reduced by 0.37-0.4 e.v. The explanation given in the earlier work of O creeping below the upper layer of Ni was confirmed.

W. M. Sternberg

MT

SOV/76-52-9-29/46

Author: Bruns, B. P., Sharnaovskaya, N. A. (Moscow)

Title: On the Course of Reaction for the Catalytic Oxidation of Carbon Monoxide on Manganese Dioxide (O poryadke reaktsii kataliticheskogo okisleniya okisi ugleroda na dvoukisi manganosa)

Publication: Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 9, pp 2137-2141 (USSR)

ABSTRACT: This catalytic reaction was studied theoretically in the present paper. For purposes of explanation it was assumed that the catalyst has two different active centers: temporary active centers which arise during the reaction (active centers type I.) and permanent active centers (active centers type II.). The conceptions of Ya. B. Zel'dovich and S. Z. Roginskiy were used in formulating the reaction mechanism (Refs 12,13). On the basis of this work an equation for the catalytic oxidation of CO was calculated. This equation explains well the course of the reaction as a first order reaction for small, and as a zero order for large, values of the ratio of the oxygen concentration to the carbon monoxide concentration:

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On the Order of Reaction for the Catalytic Oxidation of Carbon Monoxide on
Manganese Dioxide SOV/76-32-9-29/46

$$[CO] = \frac{(k_1' [CO]_0 + k_c) e^{-k_1' t} - k_c}{k_1'}$$

There are 1 figure and 24 references, 15 of which are Soviet.

Author: Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov
(All-Union Scientific Research Institute for Antibiotics)

SUBMITTED: April 13, 1957

Page 2/2

SHURMOVSKAYA, N. A.

5(4) PHASE I BOOK EXPLOITATION SOV/2216

Soveshechaniye po elektrokimii. 4th, Moscow, 1956.

Trudy... (sbornik) [Transactions of the Fourth Conference on Electrochemistry; Collection of Articles] Moscow, Izd-vo AN SSSR, 1959. 868 p. Errata slip inserted. 2,500 copies printed. Sponsoring Agency: Akademiya nauk SSSR, Otdeleniye khimicheskikh nauk.

Editorial Board: A. M. Prumkin (Resp. Ed.) Academician, O. A. Yesin, Professor, S. I. Zhdanov (Resp. Secretary), B. N. Kabanov, Professor, G. I. Zhdanov (Resp. Secretary), B. N. Kabanov, Professor, M. M. Koton, Professor, Doctor of Chemical Sciences; V. V. Losav, P. D. Lukovtsev, Professor; E. N. Solov'yeva, V. V. Stender, Professor; and O. M. Parlanovich, Ed. of Publishing House M. G. Yegorov; Tech. Ed.: T. A. Prusakova.

PURPOSE: This book is intended for chemical and electrical engineers, physicists, metallurgists and researchers interested in various aspects of electrochemistry.

COVERAGE: The book contains 127 of the 138 reports presented at the Fourth Conference on Electrochemistry sponsored by the Department of Chemical Sciences and the Institute of Physical Chemistry, Academy of Sciences, USSR. The collection pertains to different branches of electrochemical kinetics, double layer theories and galvanic processes in metal electrodeposition and industrial electrolysis. Abridged discussions are given at the end of each division. The majority of reports not included here have been published in periodical literature. No personalities are mentioned. References are given at the end of most of the articles.

A. A. Zhdanova-Gor'kaya-Polytechnic Institute Ireni A. A. Zhdanov). Influence of Aging Processes on the Work of Alkaline-Zinc Elements 768

Lukovtsev, P. D. Theory of Processes Occurring at Oxide Electrodes of Chemical Sources of Current 772

Rozentavaya, S. A., and V. L. Lavina. Mechanism of the Activation of an Iron Electrode With Small Additions of Nickel Oxides 781

Belashova, N. A., V. A. Ivanov, and L. D. Kovba (Institute of Electrochemistry, Academy of Sciences, USSR). Using Tagged Atoms to Study Processes in Chemical Sources of Current 788

Daniyel-Bok, V. S., M. Z. Mintz, V. V. Smayeva, and M. Y. Tikhonova (Nauchno-Issledovatel'skiy Institut Gorodskoy i sel'skoy avyazii MFI i Institut Avyazi SSSR - Scientific Research Institute of Rural and Urban Communications, Ministry of Communications, USSR). Investigation of Fuel Card 31/34

Shurmovskaya, N. A., and R. Kh. Burehteyn (Institute for Electrochemistry, AS USSR, Moscow). Iron-Carbon Element 801

Leykis, D. I. (Institute of Electrochemistry, Academy of Sciences, USSR). Effect of Salt or Oxide Layers Formed in Discharge or Charging Processes on the Passivation of Battery Electrodes 807

Selitskaya, S. F., and L. A. Leont'yeva. Influence of Cathodic Polarization at Low Temperatures on the Anode Potential of an Iron Electrode in an Alkaline Solution 811

Discussion [S. A. Gantman, N. S. Lidorenko, F. P. Yuppete, A. P. Asenofontov and contributing authors] 814

PART X. ELECTROLYSIS IN THE CHEMICAL INDUSTRY 821

Card 32/ 34

SOV/20-129-1-47/64

5(4)

AUTHORS: Shurmovskaya, N. A., Burshteyn, R. Kh.

TITLE: Effect of the Degree of Nickel Degasification on the Work Function of an Electron

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 1, pp 172-173 (USSR)

ABSTRACT: In a previous paper the authors investigated the effect of oxygen adsorbed on nickel on the work function of an electron (Ref 1). For this purpose the metal was degassed in a vacuum of 10^{-7} torr. By reason of data given in publications (Ref 4), according to which this vacuum is not sufficient for complete degasification, the influence of the vacuum on the difference in the contact potentials of pure metals and metals having gas adsorbed on the surface was investigated. For this, the system Ni - O was again chosen. A diode with a tungsten cathode and an anode of nickel of spectral purity was applied for determining the differences in contact potentials. The measuring device was separated from the vacuum apparatus by means of the tin seal by I. I. Tret'yakov (Ref 6). As shown in figure 1, the difference

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20361

S/020/61/136/005/022/032
B101/E206

11314 also 1164, 1043, 1143

AUTHORS: Berlin, A. A., Boguslavskiy, L. I., Burshteyn, R. Kh.,
Matveyeva, N. G., Sherle, A. I., and Shurmovskaya, N. A.

TITLE: Some electrophysical properties of polymer complexes of
tetraethylene cyanide with metals

PERIODICAL: Doklady Akademii nauk SSSR, v. 136, no, 5, 1961, 1127-1129

TEXT: The authors deal with the chelate compounds between tetraethylene cyanide and metals. The infusibility and insolubility of these compounds led to the proposal that coatings and plastics be manufactured from them (Ref. 3). The electrophysical properties of polymeric chelate films chemically bonded to metals, which were obtained by treatment of copper, iron, and nickel sheets with tetraethylene-cyanide vapor, were studied in this paper. The degreased and, in some cases, also electropolished or etched metal foils were exposed to tetraethylene-cyanide vapor at 10^{-2} mm Hg and 150 to 400°C. A film firmly sticking to the metal developed, the thickness of which was calculated from the specific gravity of the

Card 1/4

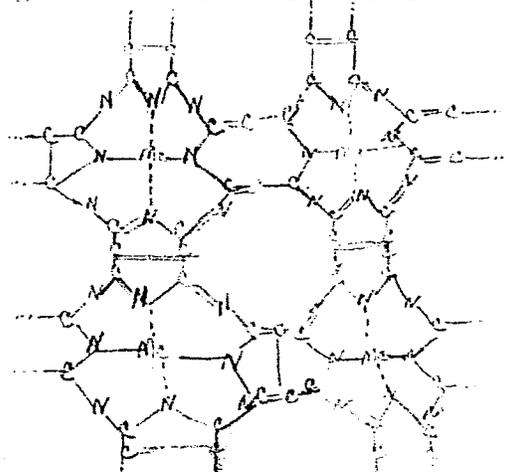
20361

S/020/61/136/005/022/032

B101/B206

Some electrophysical properties ...

polymer and from the weight of the film as being $5 \cdot 10^{-6} - 3 \cdot 10^{-5}$ cm. (Owing to the poor combustibility of the chelate film, microanalysis produced too low carbon values). The infrared spectra of the copper complex, taken by Yu. Sh. Moshkovskiy and N. D. Kostrova, showed the complete absence of maxima in the range $800 - 2300 \text{ cm}^{-1}$. A "parquet" structure of the polymer according to the structural formula



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Some electrophysical properties ...

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B101/B206

is concluded therefrom. The electrophysical properties of the films were checked by means of alternating current of 200 cps - 0.2Mc/sec. The metal covered by the film was immersed in mercury so that the film formed the dielectric of a capacitor, the plates of which consisted of the metal and of mercury. Measurements were made at 10^{-2} mm Hg because the presence of air influenced the results. This effect needs further research. The specific conductivity σ , the film capacitance and its temperature dependence, duration of heating, and the method of metal-surface treatment were determined. The following data are given for films of iron obtained after 3 hr heating at 250°C in tetraethylene-cyanide vapor: film thickness

$3 \cdot 10^{-6}$ cm; $= 3 \cdot 10^{-9}$ ohm $^{-1}$ · cm $^{-1}$; effective dielectric constant ϵ (at 3000 cps) = 7. After further 3 hr of heating, ϵ increased to

$3 \cdot 10^{-8}$ ohm $^{-1}$ · cm $^{-1}$, and to 36. Increase of temperature from 250 to 450°C, and heating for 10 hr produced the following values:

$= 5 \cdot 10^{-8}$ - $5 \cdot 10^{-6}$ ohm $^{-1}$ · cm $^{-1}$, $= 70$. The sign of the emf indicates that the film possesses p-type conductivity. $\lg \sigma = f(10^3/T)$ is represented in Fig. 2. Measurements between -40 and +220°C yielded two linear sections.

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Some electrophysical properties...

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The first lies between -40 and $+30^{\circ}\text{C}$ and corresponds to an activation energy of from 0.07 to 0.12 ev, while the second (30 to 250°C) corresponds to an activation energy of from 0.21 to 0.28 ev. The function represented is similar to that obtained for semiconductors with impurity conductivity. R and ϵ as functions of the logarithm of the frequency between 400 cps and 0.2 Mc/sec were also measured. Results are shown in Fig. 3. It is noted that R and the film capacitance decrease with increasing voltage when a constant voltage is applied. When a direct current is conducted through an alcoholic solution of copper sulfate, metallic copper firmly adhering to the film is deposited on the polymer film formed on iron. The high values indicate that the polarization of conductive macromolecules could be in question. The authors are preparing a study on the complex dielectric constant at higher frequencies. There are 4 figures and 3 Soviet-bloc references.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences USSR). Institut elektrokhimii Akademii nauk SSSR (Institute of Electrochemistry, Academy of Sciences USSR)

21502

S/020/61/137/004/027/031
B101/B208

24.2500 2209, 1160, 1137

AUTHORS: Popova, G.M., Shurmovskaya, N.A., and Burshteyn, R.Kh.

TITLE: Effect of adsorbed halogens on the work function of electrons in iron

PERIODICAL: Doklady Akademii nauk SSSR, v. 137, no. 4, 1961, 904 - 907

TEXT: It was found in the authors' laboratory that the work function of electrons in iron is affected by adsorbed oxygen, amount and sign of the potential difference depending on the conditions of the interaction between gas and metal (Ref. 1: ZhFKh, 24, 214 (1950); Ref. 2: ZhFKh, 31, 1150 (1957); Ref. 3: DAN, 81, 1093 (1950)). A study has now been made of the influence of chlorine and iodine upon the work function. The potential difference was measured by means of a vibration condenser. Molybdenum was used as reference electrode. Platelets of 20 x 20 x 0.2 mm from spectrally pure Hilger iron were studied. Chlorine vapor was obtained by thermal decomposition of gold chloride, and iodine vapor by heating of iodine. The vapors were condensed in a receiver cooled by li-

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B104/B208

Effect of adsorbed halogens ...

quid N₂. The chlorine vapor was dosed in ampuls by means of different coolants: solid isopentane (melting point -142°C, vapor pressure p of Cl 4.10⁻² mm Hg); solid ethanol (m.p. -106°C; p = 5 mm Hg); and solid CO₂ + acetone (t = -78°C; p = 63 mm Hg). The pressures of iodine vapor were 0.01 and 0.07 mm Hg. Iodometric analysis of the chlorine and iodine contents of the ampuls confirmed the values determined from vapor pressure. The iron electrode was reduced several times at 400°C with H₂, and degassed at 2.10⁻⁶ mm Hg and by heating to 700°C with high-frequency current. The difference of the contact potential between pure Fe and Fe which had adsorbed chlorine (or iodine) was measured. 1) at different p of the gas, and 2) at constant p and temperatures of 20 - 300°C. Fig. 1 presents the results for chemisorbed Cl in vacuo, Fig. 2 those for gaseous chlorine, Fig. 4 those for chemisorbed I. The mean values are given. The maximum deviation from the mean value was 25%. The change of the work function is believed to be due to irreversible chemisorption. In the entire range of temperatures, the work function increased with increasing p of chlorine. The increased work function at room temperature and on interaction with Cl

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B101/B208

Effect of adsorbed halogens ...

is explained by the formation of dipoles at the iron surface, the negative pole of which points outwardly. Sublimation of iron chlorides occurs with rising temperature. Besides, it is assumed that either Cl atoms penetrate into the iron, or iron atoms appear on the chloride surface. If Cl appears in the gaseous phase, Cl is adsorbed additionally. Unlike what is the case with I the maximum increase of the work function in I occurred at 20°C. It is assumed that on adsorption of I at room temperature, one electron passes from metal to halogen, and causes a negative charging of the surface. R.Kh. Burshteyn and L.A. Larin (Ref. 8; ZhFKh, 32, 194 (1958)) are mentioned. There are 4 figures and 13 references: 5 Soviet-bloc and 8 non-Soviet-bloc. The 3 references to English language publications read as follows: C. Oullet, E.K. Rideal, J. Chem. Phys., 3, 150, (1935); J.S. Anderson, D.F. Klemperer, Nature 184, 899 (1959); R. Suhrmann, Advances in Catalysis, 2, 497 (1957).

ASSOCIATION: Institut elektrokhemii Akademii nauk SSSR (Institute of Electrochemistry of the Academy of Sciences USSR) X

PRESENTED: November 9, 1960 by A.N. Frumkin, Academician

Card 3/6

21502

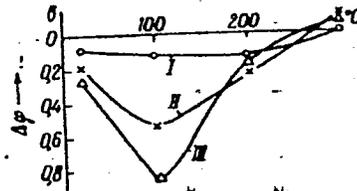
S/020/61/137/004/027/031
B101/B208

Effect of adsorbed halogens ...

SUBMITTED: October 30, 1960

Fig. 1. Influence of the temperature of iron with chemisorbed chlorine in vacuo upon the difference in the contact potential.

Legend: (I) Chemosorption at 20°C, $p = 5 \cdot 10^{-4}$ mm Hg;
(II) dto. at $p = 5 \cdot 10^{-2}$ mm Hg;
(III) dto. at $p = 6 \cdot 10^{-1}$ mm Hg



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Effect of adsorbed halogens ...

Fig. 2. Change of the difference in the contact potential as a function of the temperature of interaction between chlorine and iron at different chlorine pressures in the gaseous phase.

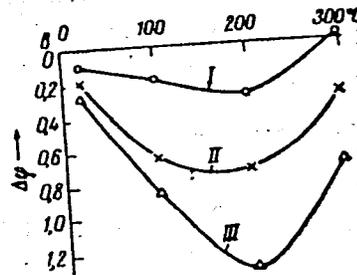
Legend:

(I) $p = 5 \cdot 10^{-4}$ mm Hg;

(II) $p = 5 \cdot 10^{-2}$ mm Hg;

(III) $p = 6 \cdot 10^{-1}$ mm Hg

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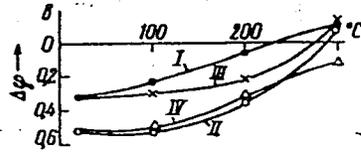


Card 5/6

Effect of adsorbed halogens ...

Fig. 4. Change of the difference in the contact potential as a function of the heating temperature of iron containing chemisorbed iodine.
 Legend: (I) Heating in vacuo after iodine chemisorption at $p = 1 \cdot 10^{-2}$ mm Hg and 20°C ;
 (II) dto. at $p = 7 \cdot 10^{-2}$ mm Hg and 20°C ;
 (III) heating at an iodine pressure of $p = 1 \cdot 10^{-2}$ mm Hg in the gaseous phase; (IV) dto. at $p = 7 \cdot 10^{-2}$ mm Hg

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 B101/B208



Card 6/6

LYUBARSKIY, G.D.; KUL'KOVA, N.V.; BURSHTEYN, R.Kh.; ISAYEVA, G.G.;
IVANOVSKAYA, I.N.; SHURMOVSKAYA, N.A.

Specific activity of nickel catalysts and thiophene adsorption. Dokl.
AN SSSR 140 no.3:634-633 S '61. (MIRA 14:9)

1. Fiziko-khimicheskiy institut im. L.Ya. Karpova. Predstavleno
akademikom S.S.Medvedevym.
(Thiophene) (Adsorption) (Nickel)

S/020/62/146/003/014/019
B101/B144

AUTHORS: Burshteyn, R. Kh., Kornacheva, G. M., Shurnovskaya, N. A.

TITLE: Study of iron corrosion by gases, using the contact potential difference method

PERIODICAL: Akademiya nauk SSSR. . Doklady, v. 146, no. 3, 1962, 631-634

TEXT: The corrosion of iron by oxygen and the effect of water vapor and elevated temperature on this process were studied. Oxygen adsorption was measured on iron powder degassed at 10^{-6} mm Hg and 500°C . $\log 1/\tau$ was measured, where τ is the time used to adsorb half the oxygen. Two stages were observed, a rapid one ending with the adsorption of $2 \cdot 10^{15}$ O_2 molecules per cm^2 which corresponds to an Fe_2O_3 layer of 6 Å thickness followed by a slow stage. When the iron covered with the maximum oxide film is again evacuated and is brought into contact with water vapor ($\text{P}_{\text{H}_2\text{O}} \sim 16-17$ mm Hg),

the iron becomes capable of adsorbing more oxygen. This activation of iron by water vapor can be repeated many times so that thick oxide layers are formed. The same activation of iron for oxygen adsorption can be

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S/020/62/146/003/014/019
B101/B144

Study of iron corrosion by ...

achieved by heating it to 200°C. The contact potential difference was measured using a molybdenum reference electrode fused into glass on Hilger iron reduced in hydrogen at 400°C and degassed at 10⁻⁶ mm Hg and 700°C. Between 20 and 300°C, the electron work function was lower for iron covered with 2·10¹⁵ O₂ molecules per cm² than for pure iron.

Chemisorption of O₂ reduced the work function by 0.2-0.25 v. After the action of water vapor the work function showed an additional drop of 0.30 v. Maximum reduction of the work function was observed at 100°C and amounted to 0.57 v. After removal of the water vapor and renewed contact with O₂, the work function increased again to the value measured before treatment with water vapor. The same effect was achieved by heating to 300°C. This activation of iron by water vapor or heating is explained by penetration of metal atoms into the oxide film surface and by the formation of an electric double layer with outwardly directed positive charge. There are 4 figures. The most important English-language reference is: J. S. Anderson, D. F. Klemperer, Proc. Roy. Soc., 258, 350 (1960).

ASSOCIATION: Institut elektrokhemii Akademii nauk SSSR (Institute of Electrochemistry of the Academy of Sciences USSR)

Card 2/3

FOKINA, L.A.; SHURMOVSKAYA, M.A.; BURSHTEYN, R.Kh.

Investigation of the reaction of oxygen with activated carbon by the
method of contact potential difference. Kin.i kat. 4 no.1:143-144
Ja-F '63. (MIRA 163)

1. Institut elektrokhemii AN SSSR. (Electromotive force)
(Oxygen) (Carbon, Activated)

BURSHEYN, R. Kh.; SHURMOVSKAYA, N. A.

"The effect of electro-negative gases on the work function of a metal."

report submitted for presentation at the Intl Conf on Physics & Chemistry of
Solid Surfaces, Providence, 21-26 Jun 64.

SHURMOVSKAYA, N.A.; BURSHTEYN, R.Kh.; MIROLYUBOVA, N.S.; KORNACHEVA, G.M.

Work function of an iron electron as influenced by absorbed
fluorine. Dokl. AN SSSR 154 no.4:926-928 F '64.
(MIRA 17:3)

1. Institut elektrokhemii AN SSSR. Predstavleno akademikom
A.N. Frumkinym.

BURBULEV, R.M.; SHUMOVSKAYA, N.M.

Effect of chemisorbed gases on the work function of metals.
Dop.khim. 34 no.10:1753-1762 O '65.

(MIRA 18:01)

L. Institut elektrokhemii AN SSSR.

SHURMUKHIN, A. F.

USSR/Farm Animals. The Swine

Q-4

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50079

Author : ~~Shurmukhin, A.F.~~ Markin Ye.F., Suleymanov M.S.
Inst : Sverdlovsk Farm Institute
Title : The Effect of Darkening of the Barn Upon the Intensity of Fat Deposition in Swine

Orig Pub : Tr. Sverdl. s.-kh. in-ta, 1957, 1, 203-205

Abstract : No abstract

Card : 1/1

USSR/Farm Animals. The Swine

Q-4

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50074

Author : Mushin G.M., ~~Shurmukhin A.F.~~
Inst : Sverdlovsk Farm Institute
Title : Experimental Utilization of SapropeI in Fattening of Swine

Orig Pub : Tr. Sverdl. s.-kh. in-ta, 1957, 1, 207-209

Abstract : Two groups of $\frac{1}{2}$ year old sows, the hybrids of large white and Braith's breeds (13 animals in each group), were fattened for a period of 60 days. Each sow of the test group received 100 gr of sapropeI before being fed. This resulted in a 132 gr (16 percent) increase of weight gains as compared to control animals.

Card : 1/1

ACC NR: AP7002384

SOURCE CODE: UR/0020/66/171/005/1076/1079

AUTHOR: Shut'ko, A. V.

ORG: none

TITLE: Quasilinear theory of two-beam instability

SOURCE: AN SSSR. Doklady, v. 171, no. 5, 1966, 1076-1079

TOPIC TAGS: nonuniform plasma, plasma instability, plasma beam interaction, electron distribution, distribution function

ABSTRACT: In view of the fact that the standard procedure of separating the resonant particles cannot be used for analysis of the instability of monoenergetic plasma beams, the authors consider a simple physical model, which is definitely related to two-stream instability, and for which simple and exact quasilinear stability equations can be derived. The averaged electron distribution function and the potential-pulsation intensity are determined for a stationary electron plasma which is homogeneous in the mean, and a solution is obtained for this system of equations in terms of the velocity, the time, the electron mass, and the electron charge. The results show, for the case of a single plasma beam, that the field-energy density is small compared with the beam energy, so that the quasilinear approximation can be employed. The reason for the smallness is that the bulk of the beam energy goes to the electrons, so that there is little left to give up to the field. The procedure can be applied to electron beams of different intensities and to the instability of a system

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UDC: 533.9

ACC NR: AP7002384

consisting of an electron and ion beam. Certain limitations of the approach are discussed. The author thanks B. B. Kadomtsev for interest in the work and V. V. Smelov and Yu. V. Sokolov for help in the numerical calculations. This report was presented by Academician M. A. Leontovich 26 February 1966. Orig. art. has: 2 figures and 21 formulas.

SUB CODE: 20/ SUBM DATE: 10Feb66/ ORIG REF: 002

Card 2/2

SHURNA, R. [Surna, R.], pobeditel' vsesoyuznykh aviamodel'nykh
sorevnovaniy (Kaunas, Litovskaya SSR)

1112 points. Kryl. rod. 16 no.7:29 JI '65. (MIRA 18:9)

SHURNIKOV, A. P.

18 27 18 27
 ✓ Hydrolytic precipitation of copper in leaching roasted zinc concentrates. *A. P. Shurnikov and V. D. Pokornyy. Zhurnal Metal. 30, No. 4, 21-9(1957).*—Lab. expts. show that hydrolysis of Cu takes place almost instantaneously on addn. of reagents, but its pptn. is limited by the rate of the neutralization reaction of the acid set free in hydrolysis. In the presence of an excess of an active neutralizing agent, Cu pptn. proceeds with an appreciable speed, and its final concn. in the soln. is detd. by the pH produced by the precipitant. Under plant conditions, roasted Zn concentrate can be used for pptn., the velocity of which is improved by higher temps. and stirring, Zn calcine particles being preferably under 0.15 mm. A simultaneous presence of Fe and Cu speed the pptn. With Zn calcine addn. three times the theoretical, Cu is pptd. to 0.3-0.3 g./l. in 30 min. at 70°.

6
AE2C

RS ha
any

FASMAN, A.B.; SOKOL'SKIY, D.V., akademik; SHUROV, K.A.

Polarization characteristics of circulatory powder electrodes.
Dokl. AN SSSR 153 no.3:653-656 N '63. (MIRA 17:1)

1. Abkhazskiy gosudarstvennyy universitet im. S.M. Kirova.
2. AN KazSSR (for Sokol'skiy).

SHUROV, N.V.

S/661/61/000/006/067/081
D243/D502

AUTHORS: Mandel'shtam, A. E., Dolgov, B. N., Kharitonov, N. P.,
Gorsikov, M. I. and Shurov, N. V.

TITLE: A tubular electrical heater with silico-organic insula-
tion stable against heat, dampness and electricity, of
watertight construction

SOURCE: Khimiya i prakticheskoye primeneniye kremneorganiches-
kikh soyedineniy; trudy konferentsii, no. 6: Doklady,
diskussii, resheniye. II Vses. konfer. po khimii i prakt.
prim. kremneorg. soyed., Len. 1958. Leningrad, Izd-vo
AN SSSR, 1961, 294-296

TEXT: In this supplement to their previous paper the authors note
some positive features of electroheating elements with silico-or-
ganic insulation, for example, their good adhesion and elasticity.
The introduction of such an electro-heating spiral element into a
metal tube is described and methods of effecting polymerization of
the silico-organic coating considered. In the following discussion

Card 1/2

A tubular electrical ...

S/661/61/000/006/067/081
D243/D302

the change in corrosion coefficient of the metal on using AC-1 (AS-1), and the elasticity of an insulation layer 1.5 mm thick, after treatment at 550°C, are considered. V. V. Vrochenskiy (Leningrad) gives an account of a thermoelement of different construction which was efficient and stable.

Card 2/2

SKOPOV, .V.F., inzh.; SHUROV, O.L., inzh.

Use of cold asphalt mastic in construction. Energ. stroi. no.32:23-
25 '62. (MIRA 16:5)

1. Stroitel'stvo Beloyarskoy atomnoy elektrostantsii imeni Kurcha-
tova tresta "Uralenervostroy".

SHUROV, S. I.

BARANOV, A.N., laureat Stalinskoy premii, redaktor; LYSYUK, V.N., redaktor; SHUROV, S.I., redaktor; AVSYUK, G.A., doktor geograficheskikh nauk, redaktor; VITVER, I.A., professor, doktor geograficheskikh nauk, laureat Stalinskoy premii, redaktor; VOLKOV, N.M., professor, doktor geograficheskikh nauk, redaktor; GERASIMOV, I.P., akademik, redaktor; ZARUTSKAYA, I.P., dotsent, laureat Stalinskoy premii, redaktor; ZENKOVICH, V.P., professor, doktor geograficheskikh nauk, laureat Stalinskoy premii, redaktor; ISAKOV, I.S., professor, admiral flota v otstavke, laureat Stalinskoy premii, redaktor; KUDRYAVTSEV, M.K., general-leytenant tekhnicheskikh voisk, redaktor; LARIN, D.A., redaktor; MARUSOV, L.Ya., inzhener-podpolkovnik, redaktor; MURZAYEV, E.M., doktor geograficheskikh nauk, laureat Stalinskoy premii, redaktor; PAVLOV, V.V., inzhener-polkovnik, laureat Stalinskoy premii; SADCHIKOV, S.F., redaktor; SALISHCHEV, K.A., professor, doktor tekhnicheskikh nauk, redaktor; FILIPPOV, Yu.V., professor, doktor tekhnicheskikh nauk, redaktor; EDEL'SHTEYN, A.V., redaktor; GUNBINA, T.N., redaktor.

[World atlas] Atlas mira. Moskva, 1954. 283 p.

(MLRA 7:9)

1. General'nyy gosudarstvennyy direktor topograficheskoy sluzhby (for Baranov)
2. Direktor topograficheskoy sluzhby (for Shurov)
3. Gosudarstvennyy direktor topograficheskoy sluzhby II ranga (for Lysyuk)
4. Direktor topograficheskoy sluzhby I ranga (for Gunbina, Larin, Sadchikov)
5. Direktor topograficheskoy sluzhby (for Edel'shteyn, Filippov)
6. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i kartografii.

(Atlases)

BARANOV, A.N., redaktor; LYSYUK, V.H., redaktor; SHUROV, S.I., redaktor;
APENCHENKO, V.S., redaktor; IPENBERG, I.M., redaktor; KURAKINA, V.I.
redaktor; MOSTMAN, S.L., redaktor; SMIRNOVA, A.L., redaktor; TYURIN,
S. A.; YAKOVLEVA, A.K.; GUREVICH, I.V., tekhnicheskii redaktor.

[World atlas; index of geographical names] Atlas mira; ukazatel'
geograficheskikh nazvanii. Moskva, 1954. 571 p. (MLRA 8:9)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i kartografii.
(Atlases)

SHIROV, S. I.

6-1-16/16

AUTHOR: None Given

TITLE: Chronicles (Khronika)

PERIODICAL: Geodeziya i Kartografiya, 1958, Nr 1, pp. 79 - 80 (USSR)

ABSTRACT: A conference of the directors of the cartographical printing-offices and of the scientific divisions for map-composition took place in the Central Office for Geodesy and Cartographyth at the Ministry of the Interior of the USSR from December 16 to December 20th, 1957. This conference was devoted to the problems concerning the state of the cartographical printing-offices GUGK and to the measures required to fulfil the plan for 1958. The representatives of the military-topographical office, the TsNIIGA i K and the MIIGA i K attended this conference. The conference was opened by the director of the GUGK (Central Office for Geodesy and Cartography), A. N. Baranov. Lectures were held by: 1) The head of the division GUGK - G. V. Artamonov on: "On the performance of the plan by the cartographic printing-offices GUGK within 11 months of the

Card 1/2

6-1-16/16

Chronicles

year 1957. 2) A. B. Kazakov, Engineer-in-chief of the planning-division GUGK "On the project of the plan for 1958". 3) The chief of the division for work and wages GUGK L. P. Yegorov "On standardizing and tariffs for cartographical works". 4) P. N. Novozhilova, Engineer-in-chief of the division GUGK "On Measures for improving the organization of production in the cartographical factories and in the NRK-Chast' GUGK". 5) S. I. Shurov, editor of the division GUGK: "On the editorial- and composition works". The military-historical maps of the third volume of the sea-atlas are already printed in the printing-office of Minsk. The maps for the great Soviet encyclopedia are already completed. There comprise 2500 maps altogether. The lay-out of the building of the printing-office in Novosibirsk was changed. The printing-offices in Omsk and Tbilissi (Tiflis) worked unrhythmically. The cartographic industry has no scientific research station. The young experts are insufficiently promoted.

AVAILABLE: Library of Congress

Card 2/2

SAFRONOVA, V.A., otv.red.; SHUROV, S.I., red.; BASHLAVINA, G.N., red.;
VORONINA, A.N., red.; GUREVICH, I.V., red.; ZASLAVSKIY, I.I.,
red.; KOZLOV, F.M., red.; LARIN, D.A., red.; RAUSH, V.A., red.;
SAMOYLOV, I.I., red.; SLADKOVA, Ye.A., red.; STROYEV, K.F., red.;
SCHASTNEV, P.N., red.; TUTOCHKINA, V.A., red.; ERDEL', V.G., red.;
DYUZHEVA, A.M., red.kart; POLYANSKAYA, L.A., red.kart

[Geographical atlas of the U.S.S.R. for the seventh grade] Geogra-
ficheski atlas SSSR dlia 7-go klassa. Moskva, 1958. (MIRA 12:5)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i karto-
grafii. 2. Nauchno-redaktsionnaya kartosostavitel'skaya chast'
Glavnogo upravleniya geodezii i kartografii Ministerstva vnutrennikh
del SSSR (for all except Dyuzheva, Polyanskaya).
(Atlases)

DRIATSKAYA, E.M., otv.red.; ~~SHUROV, S.I.~~, red.; BASHLAVINA, G.N., red.;
VORONINA, A.N.; GUREVICH, I.V., red.; ZASLAVSKIY, I.I., red.;
KOZLOV, F.M., red.; LARIN, D.A., red.; RAUSH, V.A., red.;
SAMOYLOV, I.I., red.; SLADKOVA, Ye.A., red.; STROYEV, K.F., red.;
SCHASTNEV, P.N., red.; TUTOCHKINA, V.A., red.; ERDELI, V.G., red.

[Geography atlas for the sixth grade] Geograficheskii atlas dlia
6-go klassa. Moskva, 1958. 32 p. (MIRA 12:9)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i
kartografii. 2. Nauchno-redaktsionnaya kartosostavitel'skaya
chast' Tsentral'nogo nauchno-issledovatel'skogo instituta
geodezii, aeros"yemki i kartografii.
(Maps)

SHUROV, S.I., obshchiy red.; BLINOVA, N.I., otv.red.; IVANOV, Yu.M., red.
kart; IGNATENKO, A.N., red.kart; KOLESNIKOVA, A.G., red.kart;
LEBEDEVA, S.K., red.kart; PENSON, Ye.E., red.kart; PERFIL'YEVA,
N.A., red.kart; SERGEYEVA, S.I., red.kart; SMIRNOVA, A.L., red.
kart; KHOLODOK, V.D., red.kart; SHURAN, Ye.M., red.kart; KUZNETSOVA,
O.L., tekhn.red.; LIFSHITS, N.I., tekhn.red.; SKALICHEV, A.T.,
tekhn.red.

[World atlas] Atlas mira. Moskva, Glav.upr.geodez. i kartografii
MVD SSSR, 1959. 324 p. (MIRA 12:12)
(Atlases)

SAFRONOVA, V.A., otv.red.; SHUROV, S.I., red.; BASHLAVINA, G.N., red.;
VORONINA, A.N., red.; GUREVICH, I.V., red.; ZASLAVSKIY, I.I., red.;
KOZLOV, F.M., red.; LARIN, D.A., red.; RAUSH, V.A., red.; SAMOYLOVA,
I.I., red.; SLADKOVA, Ye.A., red.; STROYEV, K.F., red.; SCHASTNEV,
P.N., red.; TUTOCHKINA, V.A., red.; ERDELI, V.G., red.; DYUZHEVA,
A.M., red.kart; POLYANSKAYA, L.A., red.kart

[Geographical atlas of the U.S.S.R. for the seventh grade] Geogra-
ficheski atlas SSSR dlia 7-go klassa. Moskva, 1960. 31 col.maps.
(MIRA 14:3)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i karto-
grafii.

(Russia--Maps)

MEKLER, M.M., .otv.red.; SHUROV, S.I., red.; BASHLAVINA, G.N., red.;
VORONINA, A.N., red.; GUREVICH, I.V., red.; ZASLAVSKIY, I.I., red.;
KOZLOV, F.M.; red.; LARIN, D.A., red.; LYALIKOV, N.I., red.;
MAMAYEV, I.I., red.; NIKISHOV, M.I., red.; RAUSH, V.A., red.;
SAMOYLOV, I.I., red.; SLADKOVA, Ye.A., red.; STROYEV, K.F., red.;
SCHASTNEV, P.N., red.; TUTOCHKINA, V.A., red.; ERDELI, V.G., red.;
BUSHUYEVA, M.P., red.kart; DYUZHIEVA, A.M., red.kart; KROTKOV, B.S.,
red.kart; MESYATSEVA, L.N., red.kart; PEKHOVA, Z.P., red.kart;
POLYANSKIYA, L.A., red.kart; SAFRONOVA, V.A., red.kart; FEDOTOVA,
N.I., red.kart; FETISOVA, N.P., red.kart; CHERNYSHEVA, L.N., red.kart;
BUKHANOVA, N.I., tekhn.red.; KUZNETSOVA, O.L., tekhn.red.; NIKOLAYEVA,
I.N., tekhn.red.

[Atlas of the U.S.S.R. for the secondary school; course in economic geo-
graphy] Atlas SSSR dlia srednei shkoly; kurs ekonomicheskoi geografii.
Moskva, Glav.uprav.geodez. i kartografii M-va geol.i okhrany nedr SSSR,
1960. 50 p. (MIRA 13:12)
(Geography, Economic--Maps)

SHURGV, S.I., red.

[Atlas of modern history; for secondary schools] Atlas
novoi istorii; dlia srednei shkoly. Moskva, 1962=. 1 v.
(MIRA 17:3)

1. Russia (1923- US.S.R.) Glavnoye upravleniye geodezii
i kartografii.

SOKOLOV, V.M. Priginal uchastiye MYSHETSKAYA, Ye.N.; SHUROV, S.I.,
red.; BASHLAVINA, G.N., red.; BIBIK, A.Ye., red.;
ZASLAVSKIY, I.I., red.; KONDRAT'YEV, B.A., red.; MYASISHCHEVA,
Ye.I., red.; SOLOV'YEV, A. I., red.; STROYEV, K.F., red.;
SCHASTNEV, P.N., red.; TANANKOVA, A.I., red.; TEREKHOV, N.M.,
red.; LOBZOVA, N.A., red.

[Atlas of Moscow Province] Atlas Moskovskoi oblasti. Moskva,
1964. 12 p. (MIRA 18:3)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i
kartografii.

SHUROV, S.V., kandidat ekonomicheskikh nauk; KHALFEN, A.A., nauchnyy sotrudnik.

Economic problems of rural electric power plants. Nauka i pered. op.
v sel'khoz. 6 no.11:11-15 N '56. (MIRA 10:1)

(Electric power plants)

BRUNOV, S. V. and BRUNOV, N. N.,

"The Economic Benefits of Utilizing Electric Power in Agriculture."

report presented at the 14th Sectional Meeting of the World Power Conference, Montreal, Canada, 7-12 Sep. 1958.

SHUROV, S. V.

30(7)

AUTHOR: Veličković, B., Doctor of Engineering and Professor
TITLE: The Twelfth Special Session of the World Power Conference

PERIODICAL: Tehnika, 1959, Nr 1, pp 20f-20i (YUG)

ABSTRACT: The Twelfth Special Session of the World Power Conference was held from 7 to 11 September 1958 in Montreal. The Eleventh Special Session of this Organization was held in Beograd in 1957. The theme of the Twelfth Special Session in Canada was "Economic Trends in the Production, Transmission and Utilization of Fuel and Power". Various papers were read by delegates from various countries including the USSR, Poland, Czech, and Yugoslavia. The USSR delegates were: P. Ivanichukov on "Economic Principles for Calculating the Capacities of Hydropower Plants"; P. Ivanichukov and P. Svirnov on "Formation of a Single Inter-Connected

Card 1/3

Electric Power Network in the USSR, its Significance for the National Economy and its Economic Indices"; D. Tarsoy and T. Tarsoy on "Efficiency of Fuel Utilization in USSR Refineries"; K. Kozlov and S. Shurov on "Economic Advantages of the Use of Electric Power in Agriculture"; and I. Budzka on "Technical and Economic Problems of Bringing Electric Power to Villages". The Polish delegates presented the following papers: Professor T. Lankowski on "Determining the Upper Limit of Mineral Reserves in Coals Above which Extraction is Profitable" and the Effects of Mineral Reserves on the Use of Steam Turbines with Extraction in an Electric Power System". The GDR papers were: V. Krol on "Water Gas - Steam Cycle with Supplementary Firing" and O. Matkowski on "Economic Review of the Plans for Thermal Power Plants for Power

Card 2/3

and Heating". The Yugoslav delegates presented the following papers: Doctor of Engineering M. Ljekar on "Installed Capacities of Hydropower Plants and the Degree of Utilization of Hydropower Resources"; Professor and Engineer A. Strunac on "The History of Water Turbine Construction in Yugoslavia"; J. Mihailovic and M. Kostic on "Use of Poor-quality Coal in Yugoslav Thermal Power Plants" and D. Matkovic on "A Supplement to the Calculation of Electric Power Production and Transmission Costs".

Card 3/3

UDZKO, I.A., SHIROV, S.V.

"MEANS of increasing the possibility in farms electrification and the rational electric power consumption."

Report submitted for the Symposium on Rational Electric Power Consumption,
Warsaw, Poland 22-25 May 1962

APEL'TSYN, I.E., doktor tekhn.nauk; BARS, Ye.A., kand.geol.-min.nauk;
BORISOV, Yu.P., kand.tekhn.nauk; VELIKOVSKIY, A.S., prof.; VYSOTSKIY,
I.V., kand.geol.min.nauk; GOVOROVA, G.L., dots.; DAKHNOV, V.N., prof.
ZHDANOV, M.A., prof.; ZHUKOV, A.I., dots.; KOTYAKHOV, P.I., prof.;
KREMS, A.Ya., doktor geol.-min.nauk; MURAV'YEV, I.M., prof.;
MUSHIN, A.Z., inzh.; NAMIOT, A.Kh., kand.tekhn.nauk; KHODANOVICH,
I.Ye., kand.tekhn.nauk; KHLYSTOV, V.T., inzh.; CHERNOV, B.G., kand.
tekhn.nauk; SHUROV, V.I., dots.; SAVINA, Z.A., vedushchiy red.;
POLOSINA, A.S., tekhn.red.

[Manual fo petroleum extraction] Spravochnik po dobyche nefi.
Pod obshchei red. I.M.Murav'eva. Moskva, Gos. anuchno-tekhn.izd-vo
neft. i gorno-toplivnoi lit-ry. Vol. 1. 1958. 540 p. (MIRA 11:4)
(Petroleum industry)

SHUROVA, K.

USSR/Mathematics - Perturbed Motion Jan/Feb 53

"Variations of Poincaré's Equations," K. Ye. Shurova, Moscow

"Priklad Matemat i Mekhan" Vol 17, No 1, pp 123-124

Analyzes Poincaré's eqs representing motion of system, bound by holonomic relations. Applies these equations to perturbed motion. Received 8 Oct 52.

242T69

SHUROVA, K. Ye.

USSR/Mathematics - Variation of Poincare equation

FD-645

Card 1/1 : Pub. 85 - 12/12

Author : Shurova, K. Ye.

Title : Remarks on K. Ye. Shurova's article "Variation of the Poincare equations"

Periodical : Prikl. mat. i mekh., 18, p 384, May/June 1954

Abstract : The authoress corrects an error on page 124 of her previous article, PMM, 17, No. 1, 1953, which was pointed out to her by I. S. Arzhanykh.

Institution : --

Submitted : --

SHUROVA, K. Ye. Cand Phys-Math Sci -- (diss) "Certain properties of
Poincaré's equations." Mos, 1955. 5 pp (Mos State Univ im M. V. Lomonosov.
Mech Math
Phys Faculty), 150 copies (KL, 55-58, 98)

16(1)

AUTHOR:

Shurova, K.Ye.

SOV/55-58-3-7/30

TITLE:

Fundamental Invariant of the Equations in Variations
(Osnovnoy invariant uravneniy v variatsiyakh)

PERIODICAL:

Vestnik Moskovskogo universiteta, Seriya matematiki, mekhaniki,
astronomii, fiziki, khimii, 1958, Nr 3, pp 47-50 (USSR)

ABSTRACT:

Let the Poincaré equations be given in the canonical form
given by Chetayev [Ref 2] :

$$\frac{dy_s}{dt} = \sum c_{\alpha s \beta} y_\beta \gamma_\alpha - X_s H, \quad \gamma_s = \frac{\partial H}{\partial y_s} \quad (s = 1, \dots, k)$$

where k is the number of the degrees of freedom. In [Ref 4] the author set up the corresponding system of equations in the variations β_s and ω_s . Now it is proved that the exterior quadratic form (see Cartan [Ref 1])

$$\Omega = \sum [\beta_s, \omega_s] - \sum^* c_{\alpha \beta s} [\omega_\alpha, \omega_\beta] y_s$$

is an invariant of the mentioned system in the variations. The sum \sum^* extends to all indices from 1 to k without re-

Card 1/2

Fundamental Invariant of the Equations in
Variations

SOV/55-58-3-7/30

petitions.

There are 4 references, 3 of which are Soviet, and 1 French.

ASSOCIATION: Kafedra teoreticheskoy mekhaniki (Chair of Theoretical Me-
chanics)

SUBMITTED: December 19, 1957

Card 2/2

L 39317-65 EWT(d)/TDB(jj)/EEC(r)/BXT/EED-2/EWP(1) Pq-4/Pg-4/Pk-4 IJP(c)
WVH/BB/GG/JXT(BF)

ACCESSION NR: AP5005853

S/0028/65/000/001/0048/0052

AUTHORS: Seyfer, A. L. (Candidate of chemical sciences); Shurova, S. S.

TITLE: Automatic information system for properties of substances

SOURCE: Standartizatsiya, no. 1, 1965, 48-52

TOPIC TAGS: data processing system, inorganic compound, chemical property,
information storage and retrieval / Ural 4 computer

^{16c}
ABSTRACT: An experimental automatic information-logistics system for physico-chemical properties of substances has been established at VINITI. The system uses a medium class universal computer of the type "Ural-4" which has an operating memory (ferrite core) of 2048 words (40 binary bits each) and has several magnetic drum (16 000 words each) and magnetic tape (64 000 words each) memories. Input is from punched tapes or cards, and output is either on punched cards or printed. Of the 300 or so different kinds of properties which are widely used (primarily physico-chemical properties are of interest here), 120 of the most important ones can be used in the system: thermo-chemical (temperature and heat of phase changes, energy and entropy of formation); thermo-physical (vapor pressure, solubility, density, viscosity); bond length and angle; optical (refraction, polarization):

Card 1/2

L 39317-65

ACCESSION NR: AP5005853

magnetic, etc. All properties are coded, forming three types: a) those that can be answered by "yes" or "no;" b) numerical characteristics; c) coefficients which go into some equation describing the property. The system, at present, has only inorganic compound properties, but only 7-8% of the total required data are available; the other 92-93% represent "voids," primarily because many of the properties have not yet been investigated or published. Three types of searches can be performed on the stored data: a) find and print out certain properties of certain compounds; b) find and print out all properties of a certain compound; c) find and print out all compounds meeting certain restrictions on their properties (for example, all compounds which melt between 150 and 1800). A special property batching procedure in the memory reduces search time of a "property packet" (40 compounds) and search within the packet for a type C search to 5-6 seconds. A type C search of all inorganic compounds takes 20-25 min. By inverting the data storage according to properties rather than compounds, it is hoped to decrease the 20-25 minutes to 1 minute for the class C search. Orig. art. has: 2 figures.

ASSOCIATION: Laboratoriya elektromodelirovaniya VINITI (Electromodeling Laboratory of the VINITI)

SUBMITTED: 00

ENCL: 00

SUB CODE: DP, IC

NO REF SOV: 003

OTHER: 001

Card 2/2 *LS*

17 8400

39123
S/058/62/000/006/049/136
A061/A101

AUTHORS: Gut'ko, A. D., Shurova, Ye. I.

TITLE: Improving the accuracy of the spectrographic determination of impurities in refined platinum and palladium

PERIODICAL: Referativnyy zhurnal, Fizika, no. 6, 1962, 14, abstract 6Q117
(In collection: "Nekotoryye vopr. emission. i molekulyarn. spektroskopii". Krasnoyarsk, 1960, 91 - 101)

TEXT: A method for the spectroscopic determination of platinum metals (0.001 - 0.05%) and Fe, Cu, Ni, Au (0.0002 - 0.01%) impurities in refined Pt and Pd is described. The sensitivity of the analysis has been improved by the sublimation of highly volatile impurities and by the concentration of difficultly volatile ones with arc discharge; by the study of the rules governing the entrance of impurities into the discharge, and by the metal transport onto the mounting electrode, when taking assays of ~1 mg for the analysis.

[Abstracter's note: Complete translation]

Card 1/1

POPOV, Viktor Stepanovich, kand. tekhn. nauk; Primal uchastiye
AGAPOV, V.M., kand. tekhn. nauk; KASATKIN, A.S., prof.,
retsenzent; SHUROVA, Yu.P., red.; FRIDKIN, L.M., tekhn.
red.

[Electrical measurements and instruments] Elektrotekhni-
cheskie izmereniia i pribory. Izd.7., perer. Moskva,
Gosenergoizdat, 1963. 543 p. (MIRA 17:2)

SHUROVENKOV, B.; CHOJSOMZHAY, L.

Grain moth (*Hadena basilinea*) in Mongolia. Zashch. rast. ot vred. 1
bol. 10 no.2 47-48 '55. (MIRA 18:4)

1. Mongol'skiy sel'skokhozyaystvennyy institut, Ulan-Bator.

CA

Mineral-oil emulsions against the apple-tree moth. B
 G. Shurovnikov. *Sady i Ogorody* (U. S. S. R.) 1941.
 No. 3, 101. - The most important method of combating
 the apple-tree moth is spraying with 0.2% of amabasin
 sulfate + 0.4% of liquid soap during the appearance of
 the beetles, followed by a 2nd spraying with internal in-
 secticides (Paris green or $Ca_3(AsO_4)_2$ with lime) in the
 usual concns. immediately after the fall of 75-80% of the
 petals. Spraying of the bare trees with emulsions of
 various mineral oils produced good results. Concentrates
 of mineral-oil emulsions are used for prepkg. working oil
 emulsions. 2%, 8 and 10% concns. of the emulsions de-
 stroyed 11, 78.4 and 93.9-95.2% of the apple tree moth
 beetles, resp. No harmful effect on the trees was observed
 W. R. Henn

AGRICULTURAL LITERATURE CLASSIFICATION

PA 61T72

SHUROVENKOV, B. G.

USSR/Medicine - Beetles
Medicine - Insecticides

Jan 1948

"The Pea Weevil and Measures for Combatting It," B.
G. Shurovenkov, 3 pp

"Sovetskaya Agronomiya" No 1

Gives procedure for controlling spread of pea weevils
in areas of USSR which grow large crops of peas.
Treats problems: 1) eliminating weevils from places
where peas are stored, either for shipment or for use
as seeds; 2) eliminating weevils from fields where
peas are grown; 3) isolation of fields not yet in-
fested; and 4) quarantine measures.

61T72

1. SHIROVYENKOV, V. G.; VOLKOV, S. T.
2. USSR (600)
4. Seeds - Disinfection
7. Electrothermal apparatus for disinfection of grain seeds from smut,
Dokl. Ak. sel'khoz, 17, No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

071110-111111 1111

USSR/Special and General Zoology - Insects.

0-3

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 69823

Author : Shuroyenkow, B.G.

Title : The Influence of Agrotechnique on the Decrease in the Number of Beetles.

Orig Pub : Zashchita rast. ot bred. i bolesney, 1956, No 2, 35-36

Abstract : In the virgin soils of Northern Kazakhstan the larvae of the broad elater are prevalent. The soft soils of the Syrtov Steppes back of the Volga and near the urals are the habitat of sowing and steppe elaters. The damage produced by the beetles increases with the number of weeds in the fields, particularly with creeping couch-grass. The number of beetles on the fields seeded with perenial grasses (lucerne, esparcet, barley), decreases with the increase in the thickness of the grass. The mellowing of the soil facilitates the entrance of carabids, which eat the eggs, larvae and puppae of the

Card 1/2

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SHUROVENKOV, B. G.

USSR/General and Special Zoology. Insects. Injurious In- P
sects and Ticks. Pests of Fruit and Berry Crops

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 49666

Author : Shurovenkov B.G.
Inst : Kurgan Agricultural Institute
Title : A New Gann Moth, Injuring Cherry (Prunus Cerasus)
Buds.

Orig Pub : Sb. nauchn. rabot. Kurgansk. s.-kh. in-t, 1956,
vyp. 3, 136-142

Abstract : The females of the cherry bud gall moth (Kokchetav-
skaya Oblast, 1949-1951) deposit their eggs in and
on the buds of the garden steppe cherry only.
The larvae live 15-20 days and feed on the flower
receptacles. Leaving the buds or falling with
them to earth, they winter in the soil in silk
cocoon. The damaged buds (22-43%) do not open;
the ovaries remain small, wilt and 20-25 days
after the blooming fall off (a description of

Card : 1/2

SHUROVENKOV, B. G.

USSR/General and Special Zoology. Insects. Injurious Insects and Ticks, Pests of Cereal Crops P

Abs Jour : Raf Zhur - Biol., No 11, 1958, No 49558

Author : Shurovenkov B.G.

Inst : -

Title : Ways of Rationalizing the Control of Wheat Thrips

Orig Pub : Zashchita rast. ot vredit. i bolezney, 1957, No 4, 27-28

Abstract : In the Syrtovaya Steppe of the Trans-Volga region, the thrips larvae crawl in behind the vaginac of the leaves near the roots prior to the maturing of the grain (at the end of July), then go into the soil to a depth of 15 cm; in November they again rise into the upper layer to spend the winter in the narrow cavities of the remnants of the stems. The larvae do not go into the interior of the soil during moderate weather and when the

Card : 1/3

SHUROVENKOV, B.G.

Distribution of *Anisoplia austriaca* Hrbst. (Scarabaeidae) in the trans-Volga Syrt steppe [with summary in English]. Zool. zhur. 37 no.8:1150-1156 Ag '58. (MIRA 11:9)

1.Kafedra zashchity rasteniy Kurganskogo sel'skokhozyaystvennogo instituta, g.Kurgan oblastnoy.
(Volga Valley--Scarabaeidae) (Grain--Diseases and pests)

SHUROVENKOV, B.G., entomolog (Velikiye Luki)

Entomophaga of the larvae of grain beetles and wireworms. Zashch.
rast. ot vred. i bol. 6 no.12:45-46 D '61. (MIRA 16:5)

SHUROVENKOV, B.

Air pilots in an agricultural institute. Grazhd.av. 18 no.5:11
My '61. (MIRA 14:5)

1. Ispolnyayushchiy obyazannosti dekana fakul'teta usovershenstovaniya agronomov pri Velikolukskom sel'skokhozyaystvennom institute.
(Velikiye Luki---Aeronautics in agriculture)

SHUROVENKOV, B.G.

Biological characteristics of larvae of the wheat thrips (*Haplothrips tritici* Kurd.) in the trans-Ural region of Siberia. Zool. zhur. 40 no.10:1568-1571 0 '61. (MIRA 14:9)

1. Department of Fundamental and Agricultural Entomology,
Agricultural Institute of Velikiye Luki.
(Siberia, Western--Thrips) (Wheat--Diseases and pests)
(Larvae--Insects)

SHUROVENKOV, B. G.

Field predatory Entomophaga (Coleoptera, Carabidae and Diptera, Asilidae) and factors determining their efficiency. Ent. oboz. 41 no.4:763-780 '62. (MIRA 16:1)

1. Kafedra entomologii Velikolukskogo sel'sko-khozyaystvennogo instituta, Velikiye Luki.

(Robber flies) (Ground beetles)

SHUROVENKOV, B.G.

Pests and diseases of plants in Mongolia. Zashch. rast. ot vred.
i bol. 8 no.7:48-50 J1 '63. (MIRA 16:9)

1. Mongol'skiy sel'skokhozyaystvennyy institut, Ulan-Bator.

SHIROVINKOV, B.G., entomolog (Ulan-Bator)

The blister beetle *Lytta caraganae*. Zashch. rast. ot vred. i
bol. 9 no.8:52 '64. (MIRA 17:12)

IGNAT'YEVA. G.M.; SHUROVENKOV, B.G.

Brief news and information. Zool. zhur. 43 no.7:1099-1102 '64.

(MIRA 17:12)

SHUROVENKOV, B.G.

Galeruca daurica Joann. in the steppes of Mongolia. Zool. zhur.
44 no.5:775-776 '65. (MIRA 18:6)

1. Velikolukskiy sel'skokhozyaystvennyy institut.

ABRAMOVA, Z.V., kand.sel'skokhoz.nauk; SHUROVENKOV, Yu.B.; PONOMARCHUK, V.I. (Uzhgorod); KHODYREV, N.G., agronom (Ust'-Labinskiy rayon, Krasnodarskogo kraya); KASUMOV, V.G., nauchnyy sotrudnik; PROKOF'YEV, M.A.; SIZOVA, G.S.

Brief information. Zashch. rast. ot vred. i bol. 9 no. 4:48-50
'64. (MIRA 17:5)

1. Leningradskiy sel'skokhozyaystvennyy institut (for Abramova).
2. Zaveduyushchiy laboratoriyey zashchity rasteniy Kurganskoy oblastnoy sel'skokhozyaystvennoy opytnoy stantsii (for Shurovenkov).
3. Azerbaydzhanskiy institut zashchity rasteniy (for Kasumov).
4. Altayskaya opytnaya stantsiya sadovodstva (for Prokof'yev, Sizova).

ACC NR: AP6022511

SOURCE CODE: UR/0133/66/000/004/0376/0378

AUTHORS: Tarnavskiy, A. L. (Candidate of technical sciences); Shurovskiy, B. B. (Engineer); Nasakina, M. B. (Engineer) 25
24

ORG: none

TITLE: Bimetallic steel-copper wire for the production of radio parts

SOURCE: Stal', no. 4, 1966, 376-378

TOPIC TAGS: wire, ^{steel} bimetal, copper, communications wire / 15G steel, 60 steel, 08kp steel, Sv-08G2S steel, Sv-08A steel, Kh18N9 steel, Sv-08GA steel

ABSTRACT: An electrolytic method for the production of bimetallic steel-copper wire containing up to 30% copper was developed. The investigation supplements the results of A. L. Tarnavskiy, V. V. Gurylev, and B. B. Shurovskiy (Bimetallicheskaya provoloka, Metallurgizdat, 1963, str. 8). It was found that steels Sv-08A and Kh18N9 were the most suitable center components of the bimetallic wire because these steels form the most reliable welding joints with other metals as compared with other steels, e.g., 15G, 60, 08kp, Sv-08G2S and Sv-08GA. The electrolytic solution had the following composition: $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ 250 g/liter and 75 kg/m³ sulfuric acid. The electrolysis was carried out at 40-50C. The current density was 250-300 ka/m². The thickness of the copper sheath, the electrical resistance, and the usual mechanical properties of the

Card 1/2

UDC: 621.771.42

ACC NR: AP6022511

wire were determined. The experimental results are tabulated. It was found that the use of steel Kh18N9 offers no significant advantages over steel Sv-08A. It is concluded that bimetallic wires may be obtained by both methods, viz.: the electrolytic and metallurgical method described in the above reference. Orig. art. has: 1 table, 1 graph, and 3 equations.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 002

Card 2/2 *bnp*

FELDEROV, V.I., SHUROVSKIY, V.

Increasing the power of two gas-turbine units. Gaz. delo no.
3-43-16 '64. (MIRA 17:5)

SHUROVSKIY, V.G.

Recovering copper from slag by sulfidation. Trudy Inst.met.
i obogoshch. 1:46-52 '59. (MIRA 12:5)
(Copper) (Slag) (Nonferrous metals--Metallurgy)

SHUROVSKIY, V.G.; VLADIMIROV, V.P.; GNATYSHENKO, G.I.; KUROCHKIN, A.F.;
SHCHUROVSKIY, Yu.A.; ADSON, N.I.; GOLOVKO, V.V.

Some physicochemical properties of charges for and the products of
the electric smelting of Dzhezkazgan copper concentrates. Izv.AN
Kazakh.SSR.Ser.met., obog.i огнеуп. no.1:8-13 '61. (MIRA 14:6)
(Dzhezkazgan—Copper—Electrometallurgy)

SHURSHAKOV, A.N.

82635

S/126/60/010/02/005/020
E111/E352

18.1230 18.8100

AUTHORS: Funke, V.F., Shurshakov, A.N., Yudkovskiy, S.I.,
Kuznetsova, K.F., Shulepov, V.I. and Yurkevich, Yu.N.

TITLE: Electrical Resistance¹ and Structure of WC-Co Alloys¹

PERIODICAL: Fizika metallov i metallovedeniye, 1960. Vol. 10,
No. 2, pp 207 - 215

TEXT: Two-phase WC-Co alloys consist of hard, brittle tungsten-carbide grains and a cobalt-base plastic phase. Some workers consider that a continuous carbide "skeleton" exists (Ref. 1) and others (Ref. 2) that there is a continuous film of cobalt in alloys with over 2% weight Co. In the present work measurements of electrical conductivity were made to settle this point. Two-phase alloys with 0-100% were prepared by powder-metallurgy methods. Specimens were heated at 1 200 °C for 1.5 hours in hydrogen. Some were then cooled at 80 °C/hour to room temperature; others were quenched in oil at 20 °C. Fig. 1 shows specific conductivity as a function of cobalt concentration for quenched (Curve 1) and annealed (Curve 2) specimens. Plots of resistivity against temperature are shown in Fig. 2. X-ray examination was carried out (with type RKD and Card 1/3

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E111/E352

Electrical Resistance and Structure of WC-Co Alloys

URS-50 cameras) with cobalt radiation to find the alloy structure and the cobalt lattice dimension (the latter is shown as a function of WC weight % in Fig. 3). Another series of alloys with the same cobalt content (6% by weight) but different tungsten-carbide grain size (about 0.8 - 2.2 μ) was prepared and tested. Fig. 4 shows resistivity for annealed alloys as functions of coercive force (Curve 1) and of grain size (Curve 2): the relations obtained confirmed the conclusions from the other work, that there is a continuous layer of cobalt in alloys of this composition. The work showed that 0.5% Co is sufficient to break continuity of contact between carbide grains. No solubility of cobalt in carbide up to the eutectic melting point; eutectic transformation occurred at 1250 °C; solubility of carbide in cobalt was 12-13 weight % at 1200 °C. The reported (Ref. 11) loss in plasticity of the cobalt layer the authors attribute to lattice distortion at the cobalt/tungsten-carbide boundary surface.

There are 4 figures, 2 tables and 11 references: 6 Soviet,
4 English and 1 German.
Card 2/3

YAKOVLEVA, M.N.; SHURSHALINA, M.A.

Field method of determining the forms in which uranium is carried
in natural waters. Radiokhimiia 1 no.4:445-449 '59.

(MIRA 13:1)

(Uranium)

SHURSHALINA, M.A.

Role of thermal diffusion in the transformation process of
radon-bearing waters. Sov.geol. 4 no.12:128-131 D '61.
(MIRA 15:2)

(Radon)
(Water, Underground)

SHURSHALOV, M.F.

Studying fundamentals of industrial production at a diesel locomotive depot. Politekh. obuch. no.8:15-21 Ag '59. (MIRA 12:10)

1.Srednyay shkola No. 97. stantsiya Rtishchevo Saratovskoy oblasti.
(Rtishchevo--Vocational education)
(Diesel locomotives---Repairs)

SHURSHALOV, VLADIMIR MIKHAYLOVICH v.c.

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OSNOVANIYA DEYSTVITEL'NOSTI MEZHDUNARODNYKH DOGOVOROV / BASIC ACTIVITY OF
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230 P.

AT HEAD OF TITLE: AKADEMIYA NAUK SSSR. INSTITUT PRAVA.

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Searching for reefy massifs. Prikl. geofiz. no.28:10-22 '60.
(MIRA 14:3)

(Bashkiria—Seismic prospecting)

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A., tekhn.red.

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promyshlennoi produktsii. Moskva, Gosfinizdat, 1959. 207 p.
(MIRA 12:11)

(Costs, Industrial)

SHURSHIN, M.I., inzh.

Water supply for underground hydraulic coal mining. Ugol' 33 no.6:
7-11 Je '58. (MIRA 11:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Gidrougol'.
(Hydraulic mining--Water supply)

SHURSHIN, M.I.; MULIN, N.V.

Hydraulic transportation equipment and its improvement. Ugol'
34 no.3:29-32 Mr '59. (MIRA 12:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Gidrougol'.
(Hydraulic mining--Equipment and supplies)

SHURSHIN, M.I., inzh.

Hydraulic hoisting plants in hydraulic mines. Ugel' 34 no.6:15-18
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1. Vsesoyuznyy nauchno-issledovatel'skiy institut Gidrougol'.
(Hydraulic mining) (Coal mines and mining) (Mine hoisting)

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Problem of choosing the best system of underground hydraulic transportation. Vop.rud. transp. no.4:217-228 '60. (MIRA 14:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektno-konstruk-torskiy institut dobychi uglya gidravlicheskim sposobom.
(Hydraulic conveying) (Mine haulage)

CHUPSHIN, M.I.

Characteristics of supplying hydraulic mines with electricity.
Trudy VNIIGidrouglia no.4:112-118 '64. (MIRA 18:3)

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konstruktorskiy institut dobychi uglya gidravlicheskim sposobom.

PRONIN, G.Ya., inzh.; SHURSHIN, P.S., inzh.

Self-propelled internal centering clamp for welding pipes
without reinforcing rings. Stroi. truboprovod. 6 no.8:20-21
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